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The present invention provides for a composition comprising:

a composition formed by heating to a temperature of from about 300°C and above a mixture of:

an organometallic composition and an aromatic-acetylene containing compound; and wherein said organometallic composition comprises the formula:

$$C = C + \left(R_x\right) + \left(C = C\right)_m + \left(R_y\right)_s = A$$

wherein A is selected from the group consisting of H,

and c = c;

wherein M is a metal;

wherein Rx and Ry are independently selected from the group consisting of an aromatic, a substituted aromatic group and combinations thereof;

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wherein m, s and z are ≥ 0 ;

wherein m and s are independently determined in each repeating unit;

wherein said aromatic-acetylene containing composition is 1,2,4,5-tetrakis(phenylethynyl)benzene, 1,2,4-tris(phenylethynyl)benzene or 1,3,5-tris(phenylethynyl)benzene; and

wherein said organometallic composition and said aromatic-acetylene composition are molar mix proportions of between 1 and 99 of said organometallic composition and between 99 and 1 of said aromatic-acetylene composition.